

## **AMENDMENTS TO THE CLAIMS**

This listing of claims will replace all prior versions, and listings, of claims in the application:

### **Listing of Claims:**

- 1    1.    (Currently Amended) A microphone comprising:
  - 2    a) a microphone enclosure;
  - 3    a) a-b) a plurality of electrical contacts for interfacing with an external device;
  - 4    and
  - 5    b) a-c) a circuit within the microphone enclosure, connected to at least one
  - 6    electrical contact, which transmits data about the microphone to the external
  - 7    device through the at least one electrical contact, wherein the data identifies a
  - 8    type of the microphone.
  
- 1    2.    (Original) The microphone of claim 1 where the circuit forces the voltage potential between the at least one electrical contact and another of the plurality of electrical contacts to be zero.
  
- 1    3.    (Original) The microphone of claim 1 where the circuit forces the voltage potential between the at least one electrical contact and a ground electrical contact to be zero.
  
- 1    4.    (Original) The microphone of claim 1 where the circuit includes a resistor having a first and a second terminal, the first resistor terminal being connected to the at least one electrical contact, the second resistor terminal connected to another of the plurality of electrical contacts.

1       5.     (Original) The microphone of claim 1 where the circuit includes a  
2     capacitor having a first and a second terminal, the first capacitor terminal being  
3     connected to the at least one electrical contact, the second capacitor terminal  
4     connected to another of the plurality of electrical contacts.

1       6.     (Original) The microphone of claim 1 where the circuit includes an  
2     inductor having a first and a second terminal, the first inductor terminal being  
3     connected to the at least one electrical contact, the second inductor terminal  
4     connected to another of the plurality of electrical contacts.

1       7.     (Original) The microphone of claim 1 where the circuit includes a  
2     programmable read only memory storing data that identifies at least one of the  
3     following: the microphone manufacturer, the microphone manufacture date, the  
4     microphone model number, the microphone serial number, the microphone  
5     frequency response, whether the microphone uses phantom power, the desired  
6     pre-amplifier gain, and the microphone dynamic response.

1       8.     (Original) The microphone of claim 1 where the circuit includes a serial  
2     programmable read only memory storing data that identifies at least one of the  
3     following: the microphone manufacturer, the microphone manufacture date, the  
4     microphone model number, the microphone serial number, the microphone  
5     frequency response, whether the microphone uses phantom power, the desired  
6     pre-amplifier gain, or the microphone dynamic response.

1       9.     (Original) The microphone of claim 1 where the circuit includes a serial  
2     electrically erasable programmable read only memory storing data that identifies  
3     at least one of the following: the microphone manufacturer, the microphone  
4     manufacture date, the microphone model number, the microphone serial number,

5 the microphone frequency response, whether the microphone uses phantom  
6 power, the desired pre-amplifier gain, or the microphone dynamic response.

1 10. (Currently Amended) An interface unit comprising:  
2 a) a first connector having a plurality of electrical contacts for interfacing  
3 with a microphone, wherein the microphone transmits data about the  
4 microphone to the interface unit through the first connector, wherein the data  
5 identifies a type of the microphone; and  
6 b) a second connector having a plurality of electrical contacts for interfacing  
7 with a computer system via a digital bus;  
8 wherein the interface unit is operable to obtain data from the microphone,  
9 about the microphone; and  
10 wherein the interface unit is operable to transmit the data to the computer  
11 system.

1 11. (Original) The interface unit of claim 10 further comprising:  
2 c) an amplifier for amplifying an analog signal received from the  
3 microphone;  
4 d) an analog-to-digital converter, coupled to the amplifier;  
5 e) a buffer, coupled to the analog-to-digital converter;  
6 f) a bus interface coupled to the buffer; and  
7 g) an I/O port for communicating with a computer system.

1 12. (Original) The interface unit of claim 11, wherein the analog-to-digital  
2 converter is also coupled to a microphone bias circuit.

1 13. (Original) The interface unit of claim 11, wherein the analog-to-digital  
2 converter is also coupled to a microphone bias circuit that contains a resistor

3 having a first terminal and a second terminal, the first resistor terminal connected  
4 to at least one of the first connector's plurality of electrical contacts.

1 14. (Original) The interface unit of claim 11, wherein the first connector's  
2 plurality of electrical contacts includes a first electrical contact and a second  
3 electrical contact;  
4 wherein the bus interface is coupled to the first electrical contact, which contains  
5 a serial clock signal; and  
6 wherein the bus interface is coupled to the second electrical contact, which  
7 contains serial data signals.

1 15. (Original) The interface unit of claim 11, further comprising a switch that  
2 is configured to identify a physical parameter of a microphone.

1 16. (Original) The interface unit of claim 15, wherein the switch is coupled to  
2 the bus interface.

1 17. (Original) The bus interface of claim 10 further comprising a third  
2 connector for interfacing with a second microphone.

1 18. (Original) The interface unit of claim 10 further comprising a third  
2 connector for interfacing with another interface unit.

1 19. (Currently Amended) A microphone comprising:  
2 a) a connector having a plurality of electrical contacts for interfacing with a  
3 computer system via a digital bus; and  
4 b) wherein the microphone is operable to transmit data about the microphone  
5 to the computer system via the connector, wherein ~~the microphone includes~~  
6 ~~data about the microphone~~the data identifies a type of the microphone.

1    20. (Original) The microphone of claim 19 further comprising a  
2    programmable read only memory storing data that identifies at least one of the  
3    following: the microphone manufacturer, the microphone manufacture date, the  
4    microphone model number, the microphone serial number, the microphone  
5    frequency response, whether the microphone uses phantom power, the desired  
6    pre-amplifier gain, and the microphone dynamic response.

1    21. (Original) The microphone of claim 19 further comprising a serial  
2    programmable read only memory storing data that identifies at least one of the  
3    following: the microphone manufacturer, the microphone manufacture date, the  
4    microphone model number, the microphone serial number, the microphone  
5    frequency response, whether the microphone uses phantom power, the desired  
6    pre-amplifier gain, or the microphone dynamic response.

1    22. (Original) The microphone of claim 19 further comprising a serial  
2    electrically erasable programmable read only memory storing data that identifies  
3    at least one of the following: the microphone manufacturer, the microphone  
4    manufacture date, the microphone model number, the microphone serial number,  
5    the microphone frequency response, whether the microphone uses phantom  
6    power, the desired pre-amplifier gain, or the microphone dynamic response.

1    23. (Currently Amended) A method of transferring data to a computer system,  
2    the method comprising:  
3       a) interfacing a microphone with an interface unit, wherein the microphone  
4       transmits data about the microphone to the interface unit, wherein the data  
5       identifies a type of the microphone;  
6       b) interfacing the interface unit with a computer system; and

7       c) transferring data about the microphone from the interface unit to the  
8       computer system.

1       24.      (Original) The method of claim 23, further comprising modifying at least  
2       one setting in the computer system based at least in part on the transferred data.

1       25.      (Original) The method of claim 23, further comprising modifying at least  
2       one setting in the interface unit based at least in part on the transferred data.

1       26.      (Currently Amended) A method of transferring data to a computer system,  
2       the method comprising:

3        a) interfacing a microphone with a computer system, wherein the  
4        microphone transmits data about the microphone to the interface unit, wherein  
5       the data identifies a type of the microphone; and  
6        b) transmitting data about the microphone, from the microphone to the  
7        computer system.

1       27.      (Original) The method of claim 26, further comprising modifying at least  
2       one setting in the computer system based at least in part on the transferred data.

1       28.      (Original) The method of claim 26, further comprising modifying at least  
2       one setting in the microphone based at least in part on the transferred data.

1       29.      (Previously Presented) The microphone of claim of 1, wherein the data  
2       about the microphone identifies at least one of the following: the microphone  
3       manufacturer, the microphone manufacture date, the microphone model number,  
4       the microphone serial number, the microphone frequency response, whether the  
5       microphone uses phantom power, the desired pre-amplifier gain, and the  
6       microphone dynamic response.

1   30. (Previously Presented) The interface unit of claim of 10, wherein the data  
2   about the microphone is related to at least one of the following: the microphone  
3   manufacturer, the microphone manufacture date, the microphone model number,  
4   the microphone serial number, the microphone frequency response, whether the  
5   microphone uses phantom power, the desired pre-amplifier gain, and the  
6   microphone dynamic response.

1   31. (Previously Presented) The microphone of claim 19, wherein the data  
2   transmitted is related to at least one of the following: the microphone  
3   manufacturer, the microphone manufacture date, the microphone model number,  
4   the microphone serial number, the microphone frequency response, whether the  
5   microphone uses phantom power, the desired pre-amplifier gain, and the  
6   microphone dynamic response.

1   32. (Previously Presented) The method of claim 23, wherein the data about  
2   the microphone is related to at least one of the following: the microphone  
3   manufacturer, the microphone manufacture date, the microphone model number,  
4   the microphone serial number, the microphone frequency response, whether the  
5   microphone uses phantom power, the desired pre-amplifier gain, and the  
6   microphone dynamic response.

1   33. (Previously Presented) The method of claim 26, wherein the data about  
2   the microphone is related to at least one of the following: the microphone  
3   manufacturer, the microphone manufacture date, the microphone model number,  
4   the microphone serial number, the microphone frequency response, whether the  
5   microphone uses phantom power, the desired pre-amplifier gain, and the  
6   microphone dynamic response.